

Abstract

A device is provided for operating a gas sensor (10) that includes both at least one pump cell (13) and a measuring cell (19). A constant current source (U+, S1, U-, S2, Ri) is provided that makes available a pump current (Ip) which acts upon an outer electrode (11) of the pump cell (13). The constant current source (U+, S1, U-, S2, Ri) provides at least two different amounts (I+, I-) of the pump current (Ip) and/or allows for an alternating operation having ON phases (TD) and OFF phases (TA), the duration of the ON phases (TD)/OFF phases (TA) being specifiabile. The device can be largely implemented in digital circuitry and adapted to different requirements.

(Fig. 2)